Technical Oversight Committee Meeting
February 11, 2003
South Florida Water Management District Headquarters
B-1 Storch Room
3301 Gun Club Road, West Palm Beach, Florida 33406

TOC Attendees

Garth Redfield, TOC Chair and agency rep., SFWMD
Bill Baxter, TOC agency rep., USACE
Mike Waldon, TOC agency rep., USFWS
Ken Weaver, TOC agency rep., FDEP
Mike Zimmerman, TOC agency rep., NPS/ENP
Carlos Adorisio, SFWMD
Nick Aumen, NPS/ENP
Tim Bechtel, SFWMD
Kelly Brooks, Miccosukee Tribe
Kirk Burns, SFWMD
Bahram Charkhian, SFWMD
Maxine Cheesman, SFWMD
Ken Chen, SFWMD
Linda Davis, SFWMD
Naomi Duerr, SFWMD
Gene Duncan, Miccosukee Tribe
Tony Federico, MFL, Inc. (Ag. consultant)
Larry Grosser, SFWMD
Matt Harwell, USFWS
Nenad Iricanin, SFWMD
Delia Ivanoff, SFWMD
Ron Jones, Miccosukee Tribe
Julia Lacy, SFWMD
Linda Lindstrom, SFWMD
Paul Linton, SFWMD
Juan Manzano, SFWMD
Loren Mason, USACE Jacksonville
Jim McAdams, USACE
Paul McGinnes, SFWMD
Damon Meiers, SFWMD
Cheol Mo, SFWMD
Trudy Morris, SFWMD
Dean Powell, SFWMD
Pete Rawlik, SFWMD
Pam Sievers, SFWMD
David Struve, SFWMD
Kimberley A. Taplin, USACE
Carrie L. Trutwin, SFWMD

Agenda Item #1: Approval of TOC Minutes from the November 7, 2002 TOC Meeting – Garth Redfield, SFWMD.

Garth Redfield opened the meeting at 10:05 a.m. Redfield noted that he had distributed the November 7, 2002 TOC minutes two weeks earlier for review **(Attachment A)**. During the review period, Bill Walker requested that a correction be made to the TOC minutes, and the change was made. Mike Waldon also requested a correction and an addition to the TOC minutes during the review period, and his revised paragraph was inserted. Redfield asked if there were any other recommended changes to the November minutes. There were none. He recommended approval of the November 7 TOC minutes and asked that the recommendation be seconded. The recommendation was seconded, and the minutes were formally approved by all TOC representatives.

Agenda Item #2: Introduction to the TOC Web Board and Web Site – Ken Chen and Trudy Morris, SFWMD.

Redfield offered a brief explanation of the purpose and intent of the new TOC Web site. The site was designed by staff in the District's Technical Resources Section in the Environmental Monitoring and Assessment Department to facilitate the distribution of information and announcements among TOC participants. It offers a Web board on which comments can be posted in a public forum and will also include archives of past TOC meeting minutes and links to other relevant sites. Using the TOC e-mail list, the Web site will have a "tickler" system to alert participants to new announcements and other timely information.

Trudy Morris offered a presentation **(Attachment B)** detailing the TOC Web site's contents and how to navigate the site. Someone suggested that the entire Modified Consent Decree, a copy of which could be obtained on the Web site of the University of Miami law library, be included on the site. Ken Chen said the District's Chris King will be responsible for maintaining the Web site, and the District's Carrie Trutwin will be responsible for reviewing the site's contents and checking the Web board. There were no questions or further comments about the TOC Web site.

Agenda Item #3: Water Quality Conditions Reports to the TOC – Tim Bechtel, Cheol Mo and Juan Manzano, SFWMD.

Tim Bechtel presented the July–September 2002 Water Quality Conditions Reports to the TOC **(Attachment C)**. He noted that his team had not been able to complete their usual report, but that all their data were provided in Attachment C. For the A.R.M. Loxahatchee National Wildlife Refuge (Refuge), the geometric mean for total phosphorus (TP) exceeded the interim limit in July 2002. The geometric mean was 11.2 ppb. The interim limit was 9.7, and the long-term limit was 8.3. Values for August and September were within both the interim and long-term limits. Only 10 sites were sampled in June, which was very dry. For the time period, total rainfall for the Refuge was 21.8 inches, or 282,000 ac-ft, which is fairly high. Total surface inflow was 211,000 ac-ft., for a total of nearly 500,000 ac-ft. of water, the majority of which was rainwater.

Bechtel said that based on the high volume of rainfall, he thinks it is unlikely that the July exceedance was due to phosphorus inputs. Although the District is unable to determine the exact cause at this time, rapid increases in stage have been associated with phosphorus levels above the interim limit. Because this is the second exceedance within a 12-month period, it constitutes an exceedance of the interim limit and the District is obligated to write a letter of explanation to the TOC agency principals. Redfield said the District would do so and the letter would be sent out for review and discussion before the next TOC meeting **(Action item)**.

There was discussion about the possible reason for the July exceedance in the Refuge. Bechtel pointed out that station Lox 4 sits directly across from the Village of Wellington pump stations #1 and #2, and water comes out of those pumps and tends to flow over the surface and mix with the canal. This tends to increase TP and could be a partial explanation. Mike Waldon commented that in calendar year 2002, there was one

bypass, in early July, of STA-1W. He suggested the District might want to consider looking at the bypass as a contributing factor. He also said that with STA-1W treating almost all the inflow into the Refuge, it is unlikely to be altering levels much in July. He suspects the change in flow into the Refuge is due to water being forced across the interior marsh. There was an increase in chloride concentrations at Lox 9 and 10, indicating that canal water has started flowing across the Refuge. Redfield asked Waldon to recommend stations he thought the District should check. Waldon said he thought the flow would come in across Lox 10, 12, and 15, and that the X, Y, and Z sampling stations should also be looked at. He also said it is important for the TOC to resolve the problem of changing flow patterns because STA-1 East is going to be coming online, bringing increased flows. Bechtel asked Waldon if he had talked to the Corps about setting up monitoring sites closer to the discharge area. Waldon said he had. Bechtel asked that Waldon include the District in any future talks with the Corps, and he agreed to do so.

Paul McGinnes suggested that the July exceedance seems to be as much a function of water quality as it does a hysteresis effect in the relationship between the long-term and interim limits and water quality concentration. He suggested the calculations might have to be adjusted to account for some of the significant changes that occur whenever stage changes significantly. Redfield said adjustments in the calculations could be discussed only after all the P-concentration programs have been implemented, P levels stabilized, and the flow changes made. With these steps taken and with a much longer record available, a re-examination of the limit calculation method may be appropriate. There were comments and discussion regarding the need for a water quality model for the Refuge. Waldon called it “a high priority” for the U.S. Fish and Wildlife Service.

For Shark River Slough (SRS), Bechtel said SRS met the interim limit for the year ending in September 2002. The concentration was 8.8, and the interim limit was 9.6. The District was, therefore, in compliance with the interim limit for Water Year 2002, for the first time in three years. The interim limit becomes effective on October 1, 2003, which means the District has seven months before the “misses” start to count.

For SRS flows, Bechtel said major rainfall events turned into runoff at the end of June. S-12 through S-333 were open. S-334 was sending water out to the eastern end of Tamiami Slough. There was discussion regarding the way S-333 was used at that time due to the breeding season for the Cape Sable Seaside Sparrow. Kim Taplin said the Corps got special permission to open S-333 early because of the rainfall situation, and the Corps also opened the S-12s in early July. There were no further questions or comments on SRS.

For Taylor Slough, Bechtel noted that the only data available are for S-332D and S-174. For the compliance year ending in September 2002, TP in Taylor Slough averaged less than 7 ppb, well below the fixed interim limit of 11 ppb. The last time the limit was exceeded was in 1994. Regarding individual samples, during the high-flow period in July, there were a couple of high values that went up to around 20 ppb. In general, concentrations in the flows through S-332D have been consistent.

Gene Duncan asked whether the data accounted for all the flows that entered Taylor Slough. Bechtel said the data reflected only what had gone through S-333D and S-174; there was no data from the Corps as to what had gone through the S-333 B and C pump stations. The District does not know how much of the water that went in through the pump station and spillway made it all the way down to the flowway cell and over Berm 3. The District is still working on a flow equation for that weir. Duncan asked whether that was being done, both for compliance purposes and to account for all the flow. Bechtel said that because the District does not have an estimate of flow going over the berm, he could not say how much water went to groundwater through the detention zone, nor could it be said how much water went into the flowway and entered the Park through the degraded levee.

Duncan then suggested that no determination could be made of how compliance was met. Redfield disagreed, saying the issue of how to best monitor compliance had been discussed by the TOC previously and at length, and while he could not argue that some water might be entering through various means, the District was doing its best to monitor inputs in accordance with TOC agreements. The TOC must consider how to factor in all the elements, but as there was currently not enough data to do so, determinations were being made in accordance with the previously agreed-upon process. There were no further comments.

Waldon said the Refuge would like the WQC reports to be made available in a more timely manner. He noted that the water quality numbers are six or seven months out of date by the time they come out, and he would like to be able to see in February the data for the entire calendar year so the Refuge can respond more quickly to problems. Redfield asked what the limiting factors were regarding earlier reporting of the data. There was discussion about when the data are available. There is a six-month lag in flow data, but source data can be made available more quickly. Naomi Duerr questioned whether timeliness of the data was an issue and whether the kinds of management actions the TOC would be likely to take to resolve a problem were at all sensitive to timely reporting since the group meets only quarterly and its primary goal is long-term planning, not emergency management. There was discussion regarding the need for a timely retrospective data analysis that is not driven by episodic events.

Bechtel offered data on the S-10 gates with respect to spikes and water quality. Most of the data have been below 50 ppb, so diverting S-6 has knocked off a lot of the peaks. He noted, however, that the District has no control over when ACME operates its #1 and #2 pumps. Duerr challenged the TOC to come up with recommendations for how to knock the peaks down. Bechtel pointed out that the District is very close to getting provisional flow data and QA'ed WQ data, but not preferred data, onto its Web site, probably in a matter of months. He added that he would have to confirm that with Nenad Iricanin and others at the District. Redfield proposed that at the next TOC meeting, Nenad Iricanin would present his project, and the District would consider how the agency could make the Settlement Agreement report available more quickly via the Web **(Action item)**. There were no further questions or comments.

Juan Manzano presented the Quality Assessment Report for Water Quality Monitoring, July–September 2002 **(Attachments D and E)** and Results from Various Split Studies and Round Robin Studies, March–August 2002 **(Attachments F and G)**. For the conservation area inflows and outflows (CAMB), all 128 blanks collected were within the acceptance criteria. About 3.2 percent of equipment blanks were in the range of 0.004 to 0.008 ppb. Above 8 ppb there were no blanks. He said that in the future the District would be changing the criteria to standardize the data between the District and the DEP. He presented a summary of flags for the quarter and a summary of replicates for 2002. These samples are now being taken as true splits, but were field replicates (splits, as of December).

Manzano said there have been questions about the precision of the analysis. He summarized quality control assessment given in Section III of Attachment D. There have also been questions about the order in which the replicates were collected. For the most part, the bottles for the District were collected first, not as splits, but as field duplicates or replicates, and then the DEP samples were collected. This sequence could have thrown off data from these collections. There were questions and discussion regarding the collection of replicates and why 70% of the DEP samples were higher than the District's.

Gene Duncan asked how the District decides on the flag code that indicates possible contamination. Manzano said it is arrived at through a review of the field notes, and if there is anything that could interfere with the analysis, then the sample is flagged. Redfield emphasized that a flag is based on field notes, not on lab analysis. Duncan asked if that meant, then, that the samples were being flagged before the numbers were even known. The TOC's consensus was that this was not the case, and flagging is not associated with data levels. There were comments regarding a QA review that happens after lab analysis. The key point is that metadata are part of the record, and field managers also review all flags.

Considering the split (replicate) sampling, Matt Harwell suggested that it is possible there are some slopes that are different, which might be helpful in determining whether there is anything else going on. Cheesman said the District was analyzing them in the lab, and then was sending splits to DEP to see if there are any real differences.

Redfield recalled an action item from the November 7, 2002 TOC meeting that specified that the District should do some extra graphing, and he asked if that had been done. He was referred to Figure 7 in the handout detailing a comparison of DEP versus District data **(Attachment G)**. There was discussion as to when the District had begun doing real splits. There was discussion about whether there is any interest in data that are true splits and whether, as sampling progresses, people will know which samples are true splits. Harwell pointed out that the original action item was to plot the TP data at several scales. Cheesman said that could be done and it could be put on the Web **(Action item)**.

Mike Waldon asked for an explanation of how the District physically does true splits. Charkhian asked Waldon to send his e-mail address and Charkian would provide information as to how they are done. There were no further questions or comments. Redfield adjourned the TOC meeting at 11:50 for lunch.

Redfield reconvened the TOC meeting at 12:40 p.m.

Gene Duncan, referring to the Settlement Agreement report from earlier in the meeting, said his understanding of the Settlement Agreement was that compliance is based on sampling 14 stations rather than eight or nine stations. Redfield explained that fewer stations can be sampled at lower stages, but compliance continues to be calculated until 15.24 ft, when data are not used for compliance. There was additional discussion about how the number of sampling sites is selected and how calculations are arrived at for compliance purposes.

Mike Waldon requested that at the next TOC meeting, the Corps present an update on the progress of STA-1 East. Paul Moczynski is the project leader for the Corps; Jim Sturgess is the project leader for SFWMD. Redfield said he would compile a list of the following: (1) operating plans, (2) modeling plans, and (3) vegetation plans. He will then either meet with the principals or speak with them by teleconference to ensure that the issue is addressed and placed on the next TOC meeting agenda **(Action item)**.

Agenda Item #4: Update on Agency Roles in C-111 Water Quality Monitoring
Jim McAdams, USACE. Pete Rawlik and Bahram Charkian, SFWMD.

Kim Taplin said the Corps was issued Emergency Order #8 on January 31 to operate the C-111 Project for a one-year period. Jim McAdams offered a presentation **(Attachment H)** on the IOP Monitoring Plan for the New FDEP EO of January 29, 2003. The plan is designed to accomplish the following:

- Measure the water budget for each detention area
- Measure concentrations of P and N entering and leaving detention areas
- Calculate loads of P and N entering and leaving through surface and ground water
- Measure and evaluate sources of pesticides and other pollutants to and from the detention areas

The Corps will be responsible for monitoring surface water flow, surface water stage, groundwater exchange and groundwater nutrients. The Corps is under contract to provide monitoring for interior fish THg. Both the Corps and SFWMD will provide monitoring for surface water nutrients. SFWMD will provide biological and sediment monitoring, and both the USGS and SFWMD will be responsible for meteorological and evaporation monitoring.

Redfield asked for clarification as to whether this was the same plan the District had circulated for review some months ago. Taplin said the Corps was not executing every element of it, though the Corps is doing the compliance components. The Corps is

working to push all the issues through but has no legal authority to reimburse the District if it takes over the monitoring because the 2002 GRR Supplement has not yet been approved. Taplin said the Corps has been monitoring according to EO #7, which has since been revised under EO #8 to be more inclusive. There was continued discussion about the status of the monitoring. McAdams noted that there is a Web site for reviewing all data relevant to the plan. As of the November 7 TOC meeting, a data report has been generated and is also on the Web site. Waldon asked if there was a plan to put the data on DBHYDRO. The consensus was that there is no such plan.

There was discussion regarding Berm 3 of the C-111 Project. Redfield said to his knowledge the District does not monitor water quality at any broad berm. He emphasized that it was critical for the TOC to get some solid numbers as to what is flowing over the berm, because in another year the group will need to have a defensible method for measuring P inflows into the Park. There was continued discussion about monitoring at the berm and about conceptual designs for a PASTA test facility. There was a suggestion that a sample be collected at the berm's midpoint after installation of a V-notch weir.

Aumen said ENP wants clean water in that part of the Park, and he suggested that in order to assess whether that is being achieved as the flowway is operated, the District should look at the potential for groundwater movement into and out of the Park. Also, everything that goes through the flowway and any emergency discharges that take place over the spillways and into the detention areas should be tracked. Finally, the TOC needs to decide what to do about compliance with the Consent Decree, which doesn't anticipate the reconfiguration of the new inflow from Taylor Slough.

Taplin said the Corps is still doing groundwater transects with CH2MHILL, and though the agency has not yet been paid for that, it is ready to go and is scheduled through the remainder of the fiscal year. There was discussion regarding possible flowways and sheetflow through the distribution areas. There was continued discussion regarding the monitoring of flow at Berm 3. There was discussion and disagreement as to whether even the best possible monitoring efforts would be enough to achieve a level of flow accuracy that would be sufficient for compliance with the Settlement Agreement. Redfield noted that groundwater as a loading source is included indirectly in the Consent Decree and adds another twist to the issue. It remains to be seen how the TOC will deal with it. He noted that under the Federal Data Quality Act, all federal agencies must now have data quality guidelines and he asked if the Corps had implemented them. Paul Linton said the guidelines had been implemented but that he could not say how, if, or when they would be applied.

Redfield said it would be necessary for the TOC to continue to discuss the status and progress of the C-111 Project and it will, therefore, remain on the TOC agenda for the next year or so. There were no further questions or comments.

Agenda Item #5: Basis for Revised Total Phosphorus Analysis – Dave Struve, SFWMD.

Dave Struve announced that as of September 17, 2002 the District had changed its detection limit to .002, or 2.0 ppb. He provided extensive data in **Attachment I** that supports this lower limit. There was discussion about whether it would be possible to see the concentration at 2.0 ppb, and also whether it would be possible to distinguish between 2.0 ppb and a blank. Paul McGinnes requested that there be a test to determine that there is a real signal at something above zero but less than 4 ppb. Struve said he would do that and would present the data at the next TOC meeting **(Action item)**.

Redfield asked about the status of the new TP method. Struve said it is being refined and it is working fairly well and has been written in a form that is appropriate for submission to the U.S. Environmental Protection Agency.

Mike Waldon asked what the possible effect of lowering the detection limit might be with respect to the Settlement Agreement calculations. Struve said that, mathematically, he did not know what impact the lower detection limit might have on the data. Waldon suggested that when using geometric means, the interim limit should also be lowered because geometric means give more weight to smaller numbers and result in a disproportionate effect. There was discussion about the effect of lowering the detection limit, the number of values that were lower, and the possible impact on compliance.

Redfield asked whether there had been any follow-up on an action item proposed by Ron Jones at the November 7, 2002 TOC meeting regarding the composition of stainless steel, which contains molybdenum. Struve replied that he and Meifang Zhou had written a follow-up memo (**Attachment J**) to the TOC on the issue. He said experiments to determine the effects of storing a 10-ppb solution in stainless steel had already begun. Without offering details, he said the initial feeling is that the amount of molybdenum that could potentially be released from stainless steel is small compared to the amount already present during TP analyses. Struve said a follow-up presentation would be made to the TOC at a later date regarding any determinations that had been made. Jones noted that the parameter of concern is molybdenum, not molybdate. There were no further questions or comments.

Agenda Item #6: Continuing Evaluation of the Phosphorus Concentrations in Shark River Slough; follow-up on action items (attached) from the August 1 and November 7, 2002 TOC meetings – Tim Bechtel and Cheol Mo, SFWMD.

Redfield note that no progress had been made on this item due to conflicting demands on technical staff.

Agenda Item #7: Progress on S-5A Sampling System – Bahram Charkhian, SFWMD.

Bahram Charkian reported that during the process of selecting a contractor to transfer use of the autosampler from Florida International University to the District's electronics shop, a pilot study had been performed, and those findings will be presented at the next TOC meeting. There were no questions or comments.

Agenda Item #8: Atmospheric Deposition Monitoring; Discussion of Wet Deposition Data Analysis – Bahram Charkian, SFWMD.

Bahram Charkian reported that the District's Ho Sung Ahn has the data and is currently working on a study. The findings will be presented at a future TOC meeting.

Agenda Item #9: Proposed Optimization of Coastal Zone Monitoring – Garth Redfield and Naomi Duerr, SFWMD.

Redfield said District staff are preparing a memo regarding Network Optimization and Coastal Monitoring (**Attachment K**). When the memo has been finalized and approved, it will be released. In the meantime, the TOC should read and review it and submit their comments and/or recommendations.

Naomi Duerr said the District is implementing a zero-based budget. To assist in that process, the District's Environmental Monitoring and Assessment Department (EMA) and other District staff are evaluating the mandates that are driving the need for water quality (WQ) monitoring at approximately 2,000 monitoring stations. Seventy-five percent of the stations the District is mandated to monitor are Type 1 data. Another 10-15% are Type 2 and are more open to the District's interpretation. A small number are Type 3, about which the TOC has agreed or which constitute an ongoing District research project. All the sites within the South Florida Water Quality Coastal Monitoring Network are Type 3. The District's Nenad Iricanin produced the statistical analysis for both examples and recommended stations for deletion. Duerr pointed out that District revenues are down, but demand on the agency, particularly on EMA, is up 15% from a year ago. The goal is to eliminate redundancy, decrease the workload and increase efficiency. Consequently, EMA will be contracting more of its work out. Redfield said cost sharing would be needed if the District is to continue monitoring. He asked the TOC to submit specific, detailed feedback so determinations can be made regarding the elimination of monitoring at some sites.

There was discussion about monitoring trends over time. Waldon asked whether the District was going to consider cutting the frequency of some monitoring rather than completely eliminating it. Duerr said Bahram Charkhian was conducting an analysis regarding whether the frequency of monitoring should be decreased but that on this particular analysis the District was interested only in trying to determine which stations could be eliminated.

Nick Aumen offered five comments: First, referencing a 1989 paper by Bill Walker on the statistical power of monitoring networks, Aumen suggested it was important to look not only at trends, but also at step changes. Second, what was the ecological analysis that was conducted? Third, there must be close coordination between this process and the AAT Monitoring Assessment Plan. To Aumen's knowledge, that has not yet occurred, and the sooner that happens the better. Fourth, the District should consider putting in its memo the District's mission statement so people know where the agency is coming from. Finally, the District should include non-government organizations, not just government agencies, on its distribution list for the network

monitoring memo. Redfield emphasized that detailed, as opposed to general, information about why a site should or should not continue to be monitored was significantly more valuable when asking the District's governing board for funding. Aumen suggested that many people would agree it is the District's responsibility to monitor waters it is going to be moving around the state, and that while e-mails supporting continuation of monitoring a site might not be technical in nature, they nonetheless carry weight.

There was a comment that CERP was not supposed to replace any ongoing state-funded projects. Redfield said the District would not be asking CERP to take over any monitoring that was the agency's responsibility. However, if a project is CERP-related, then that project and RECOVER ought to pick up the monitoring.

Ron Jones said the statistical analysis of the Coastal Monitoring Network Optimization study is flawed because it was designed as a spatial data set, and most of the analysis that is done on this is based on stations that have been "kriged." Therefore, cutting those stations by 25% results in a flawed analysis. There was discussion and disagreement about the issue. Redfield asked TOC participants to review the monitoring memo and submit any comments. He said the memo would be published in a few weeks and would be distributed to entities throughout South Florida. The memo will also be posted on the TOC Web site. There were no other questions or comments.

Agenda Item #10: Public Comments.

There were no questions or comments from members of the public about any item on the TOC agenda.

The TOC agreed to next meet on Thursday, May 15, 2003. Redfield thanked everyone for attending, and he adjourned the meeting at 2:40 p.m.

Final Agenda

Technical Oversight Committee

February 11, 2003; 10 a.m. to 3 p.m.

South Florida Water Management District
Headquarters, B-1 Building, Storch Room,
3301 Gun Club Road
West Palm Beach, FL 33416-4680

Introductory Comments: Additions or modifications to the agenda.
Garth Redfield (TOC Chair), SFWMD

1. * **Approval of TOC minutes from November 7, 2002 TOC meeting (10 minutes).** Garth Redfield, SFWMD
2. **Introduction to the TOC Web Board and Web Site.** Ken Chen and Trudy Morris, SFWMD
3. * **Water Quality Conditions Report to the TOC and Water Quality Assessment Report for Water Quality Monitoring (45 minutes).** Tim Bechtel, Cheol Mo and Delia Ivanoff, SFWMD.
4. * **Update on Agency Roles in C-111 Water Quality Monitoring (1 hour).** Kim Taplin, or other USACOE representative, Pete Rawlik and Bahram Charkhian, SFWMD
5. **Revised MDL for Total Phosphorus Analysis and Evaluation of Potentialo Molybdenum Interference from Stainless Steel (15 minutes).** Dave Struve, SFWMD.
6. **Progress on S5A Sampling System and Evaluation of Atmospheric Deposition Monitoring Data (15 minutes).** Bahram Charkhian, SFWMD
7. **Example of Proposed Optimization of Coastal Zone Monitoring (30 minutes).** Garth Redfield and Naomi Duerr, SFWMD.
8. **Public Comments and Date for Next TOC meeting**

*** Items for consideration and possible action by the Technical Oversight Committee.**

Attachment: Action Items from the November 7, 2002 meeting are on the following page.

Action Items from the November TOC Meeting as of November 8, 2002
Garth Redfield, TOC Chair

1. Continue studies of factors influencing phosphorus levels entering the Park through Shark River Slough.
   a. Provide data on individual structures providing the inflow (Walker commendation #2) to investigate the effects of shifting flow input points on P levels (Walker recommendation #5). This study should also include an examination of flow and stage interactions on TP at each structure. **Tim Bechtel, Steve Hill and Cheol Mo**
   b. Contact Dave Welter on Loxahatchee hydrological model and its capability to be modified for use as a water quality model. **Garth Redfield**
   c. Compare S151 to Park inflow structures for trends. Looking at various parameters may help isolate the linkage between canal and marsh levels. A longer term project, lead **TBD** (DOI or DEP?)
2. Check into high values in Taylor Slough (flow, disturbance or pumping) and provide brief letter report to TOC. **Tim Bechtel and Cheol Mo**
3. Provide data for WCA-2A and answer question as to whether values are increasing. **Tim Bechtel, et al. (time TBD)**
4. Conduct data analysis of wet phosphorus deposition data and develop brief technical paper on data quality after slash guards have been implemented. **Hosung Ahn** Make recommendation to TOC on whether atmospheric wet deposition monitoring should be continued for November meeting. **Bahram Charkhian**
5. Provide develop follow-up presentation on C-111 monitoring plan. **Pete Rawlik**
6. Develop P scatter diagrams and regression analysis for TP data from split samples in the ranges of 0 to 20 ppb, 0 - 50 and 0 to highest value. Also give 1:1 line on graphs. Provide original data to TOC. **Delia Ivanoff and Dave Struve**
7. Check into the possibility that sampling order produces a systematic bias and gives other labs overall higher values than the District. -Time of sampling is not available. No longer an issue because true split sampling is being done, as opposed to replicate sampling done in the Refuge earlier.
8. Provide a brief letter report on data and evaluations in support of the lower TP method detection limit, including lab studies that improved SOPs and lower the MDL. **Dave Struve**
9. Create a web board conference for the TOC and get a message process set up to signal TOC when materials are posted. **Ken Chen, Chris King, Trudy Morris**
10. Check whether molybdenum in stainless steel could influence TP lab analysis and resulting data from the S-5A autosampling system; letter to TOC file. **Dave Struve**
11. Provide an update on Coastal Zone monitoring optimization. **Garth Redfield and Naomi Duerr**

Walker's recommendations are given in 'Walker W.W. 2002. Analysis of recent P data from Shark River Slough inflows to Everglades National Park. DRAFT for discussion at the TOC meeting, August 1, 2002'.